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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,143	07/22/2005	Tae-Song Kim	KIST.2120.0001	7804
86980 7590 12/14/2010 North Star Intellectual Property Law, PC P.O. Box 34688 Washington, DC 20043				
EXAMINER				
CANDLER, SAMUEL M				
ART UNIT		PAPER NUMBER		
3779				
NOTIFICATION DATE		DELIVERY MODE		
12/14/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/543,143

Applicant(s)

KIM ET AL.

Examiner

SAMUEL CANDLER

Art Unit

3779

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-14 and 39-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-14 and 39-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/12/10 has been entered.

Response to Amendment

2. This office action is responsive to the amendment filed on 11/12/10. As directed by the amendment: claims 1, 3 and 39 have been amended. Claims 1, 3-14 and 39-46 are presently pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-10, 13, 39 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al (U.S. PGPub 2002/0138009) in view of Spaude et al (U.S. Patent No. 5,811,897).

5. Re claims 1, 3, 13 and 39, Brockway et al discloses a sensor 400 (see paragraph [0055]; Figure 4) having first and second electrodes 405a-b (see paragraph [0055]);

Figure 4) between which an electrical potential difference is generated (see paragraph [0023]) through supply of a current (see paragraph [0052]) and from which a current flows through the human body to a receiver 410 (see paragraphs [0022] and [0055]; Figure 4) installed on the surface of the human body; however, Brockway et al fails to disclose the current between the transmitting electrodes and the receiver as a 'conduction current.' Spaude et al teaches an intrabody communication system in which separate pairs of electrodes are used to transmit a signal by a conduction current (see col. 4 lines 32-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the device in Brockway et al's reference, such that an intrabody conduction current is used to transmit a signal, as taught and suggested above by Spaude et al, for the purpose of securing a signal transfer against noise and other manipulations (see col. 5 lines 20-30).

6. Re claim 5, Brockway et al discloses wherein the electrodes are transmitting information of a separate electrical medical device which would contain an internal circuit (see paragraph [0054]).
7. Re claims 4 and 6, Brockway et al discloses wherein the electrodes are insulated from each other (see paragraph [0053]).
8. Re claims 43-46, Brockway et al discloses controlling the output of the transmitting electrodes to be transmitted to the outside of the human body by a switching circuit 140 (see paragraph [0055]; Figure 4).
9. Re claims 7-10, Brockway does not explicitly disclose any structural location for the electrodes on the sensor device. However, Brockway et al does state that

'structural, logical and electrical changes may be made without departing from the spirit and the scope of the present invention.' It is not shown that any disadvantage would be provided by simply reshaping or moving the electrodes and would therefore be obvious to place the electrodes of Brockway in different structural locations on the sensor device. Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place the electrodes to cover the ends of the sensor, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

10. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al in view of Spaude et al and in further view of Bashiri et al (U.S. Patent No. 6,165,178). Brockway et al discloses that the transmitting electrodes are insulated from each other on the sensor but fails to disclose the details of the materials of the insulating means. Bashiri et al teaches using polyethylene and parylene as electrically insulating materials (see col. 5 lines 35-40). Therefore, it would have been obvious to one of the skill in the art at the time of invention to 'fill in the gaps' of the device of Brockway et al with the details of the device of Bashiri et al.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al in view of Spaude et al and in further view of Yoshioka et al (U.S. Patent No. 5,651,869). Brockway et al discloses an electrode which would be made of a conductive material, but he fails to disclose the details regarding the materials of the electrode. Yoshioka et al discloses using gold as an electrical contact and that it is known in the art (see col. 4 lines 9-13). Therefore, it would have been obvious to one of

the skill in the art at the time of invention to 'fill in the gaps' of the device of Brockway et al with the details of the device of Yoshioka et al.

12. Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al in view of Spaude et al and in further view of Holmes et al (U.S. Patent No. 4,267,415). Brockway et al discloses the communication circuit operating using a very low current conducted through the body to the remote receiver (see paragraph [0053]) but fails to disclose the details of how a low current is achieved. Holmes teaches a current limiting circuit that includes a resistor with a capacitor in parallel (see col. 3 lines 28-35; Figure 1). Therefore, it would have been obvious to one of the skill in the art at the time of invention to 'fill in the gaps' of the device of Brockway et al with the details of the device of Holmes et al.

Response to Arguments

13. Applicant's arguments filed 11/19/10 have been fully considered but they are not persuasive.

14. Regarding the newly-added limitations, the Examiner respectfully disagrees. The sensor device of Brockway et al is able to fit within a heart chamber; therefore, the sensor is small enough to be **capable of** being ingested and traveling autonomously within a body.

15. Regarding the ability to combine Brockway et al and Spaude et al, the Examiner respectfully disagrees. Merely the fact that the sensor of Brockway et al is connectable a "stabilizer" does not imply that it would become inoperable if moved. Additionally,

there is no suggestion that the sensing method ***as claimed*** is performed while the device is in motion.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL CANDLER whose telephone number is (571)270-3410. The examiner can normally be reached on Monday - Friday, 8 a.m. - 5 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Sweet can be reached on 571-272-4761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SAMUEL CANDLER/
Examiner, Art Unit 3779

/John P Leubecker/
Primary Examiner, AU 3779